WHAT IS CLAIMED IS:

CLAIMS

1. Apparatus for applying a liquid coating to one surface of a flexible substrate, said apparatus comprising:

a tray for containing a coating liquid,

a wiper member adjacent to said tray, and

a coating rod supported adjacent to said wiper element to pinch a substrate therebetween with a free end of the substrate extending from the rod and wiper element and a tail end of the substrate immersed in the coating liquid in the tray so that when the free end of the substrate is engaged to pull the rest of the substrate from the tray, the wiper element wipes the coating liquid from a back surface of the substrate while the coating rod forms a layer of determined thickness of the coating liquid on a front surface of the substrate.

2. The apparatus of claim 1, wherein said wiper member is secured to a front end of said tray, and said coating rod comprises a wire-wound rod.

3. The apparatus of claim 1, wherein said coating rod is supported for being moved between an operative position adjacent to said wiper element and an inoperative position away from said wiper element.

4. The apparatus of claim 3, comprising means associated with said coating rod to press the substrate into the coating liquid when the coating rod is moved to said operative

position.

5. The apparatus of claim 4, comprising a removable support plate adapted for being supported on said tray in order to support and position the substrate thereon before the coating rod is moved to said operative position.

6. Apparatus for a applying liquid coating to one side of a flexible substrate comprising:

a tray for containing a coating liquid,

a cover pivotably connected to said tray for being moved between closed and open positions,

a fixed wiper member at one end of said tray extending upwardly and outside said cover when the cover is in said closed position,

said tray being open when said cover is in said open position so that a substrate to be coated can be placed on said tray with a front part of the substrate extending on and in front of said wiper member,

said substrate being immersed in the coating liquid when the cover is in closed position, and

a coating rod extending across said cover for being positioned adjacent to said wiper member when said cover is closed to engage the substrate between the wiper member and the coating rod with a front part of the substrate extending in front of the wiper member to enable the front part of the substrate to be engaged to pull the substrate from the tray between the wiper member and the coating rod and cause a layer of the coating liquid to be applied to a

top surface of the substrate with a determined thickness while a bottom surface of the substrate is wiped clean by the wiper member.

7. The apparatus of claim 6, wherein said wiper member is made of silicone rubber.

8. The apparatus of claim 6, wherein said tray includes opposite side panels to which said cover is pivotably connected.

9. The apparatus of claim 8, wherein each side panel includes a guide pin and said cover includes guide slots each slidably receiving a respective said guide pin.

10. The apparatus of claim 6, comprising a projecting member integral with said cover to press the substrate into the coating liquid when the cover is closed.

11. The apparatus of claim 6, wherein said coating rod comprises a shaft and a wire wound on said shaft to establish the thickness of the layer of coating liquid applied to the substrate.

12. The apparatus of claim 11, wherein said wire has a determined diameter which establishes the thickness of the layer of coating liquid applied to the substrate.

13. The apparatus of claim 6, comprising a removable support plate adapted for being supported on said tray when the cover is in said open position to enable the substrate to

be positioned on the support plate without falling into the coating liquid.

14. The apparatus of claim 6, comprising a filling channel for introducing coating liquid into the tray when the cover is in closed position, said filling channel being formed between the tray and the closed cover.

15. The apparatus of claim 6, wherein the coating liquid comprises an adhesive.

16. A method of applying a liquid coating on one surface of a flexible substrate, comprising the steps of:

placing a substrate which is to be coated on one side thereof, above a coating liquid contained in a reservoir in a tray, the substrate having a forward end extending on and beyond a wiper element at the front of the tray,

pressing the substrate into the coating liquid in the reservoir while keeping the substrate on the wiper element and while positioning a coating rod adjacent to the wiper element to pinch the substrate between the wiper element and the coating rod, and

pulling the substrate between the wiper element and the coating rod to form a coating of the coating liquid on one surface of the substrate facing the coating rod while the other surface of the substrate is wiped clean of coating liquid by said wiper element.

17. The method of claim 16, comprising pivotably connecting a cover to the tray for pivotal movement between open and closed positions and securing the coating rod to the cover so that when the cover is in closed position the coating rod is positioned adjacent to the

wiper element.

18. The method of claim 16, comprising placing a removable support on the tray to support the substrate when the cover is in open position.

19. The method of claim 17, comprising forming a projecting blade on said cover to press the substrate into the coating liquid when the cover is in closed position.

20. The method of claim 16, wherein said wiper element is made of silicone rubber.

21. The method of claim 16, wherein the coating liquid includes an adhesive substance.

22. The method of claim 17, wherein the substrate is pulled on and over the wiper element as the substrate is pulled between the coating rod and the wiper element.

23. The method of claim 17, comprising forming a filling channel for the coating liquid between the tray and the cover when the cover is in closed position.

24. The method of claim 17, comprising establishing a thickness of the coating liquid on the substrate by providing a wire of determined diameter wound on said rod.